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Rev 1938

U. S. DEPARTMENT OF AGRICULTURE

FARMERS' BULLETIN No. 1308



MARKETING *the* COWPEA SEED CROP



Washington, D. C.

Issued January 1923; revised 1938

MARKETING THE COWPEA SEED CROP

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THE IMPORTANCE of the cowpea seed crop in the United States can be measured by the acreage of cowpeas grown for hay and the increasing acreage planted for grazing and soil improvement. More than 2 million acres, on an average, are harvested annually for hay, producing in some years upwards of 2 million tons. The acreage grazed or plowed under for soil improvement in 1936 and 1937 was over 1,700,000 acres, or more than three times the acreage of previous years.

Almost half of the farms that grow cowpeas do not harvest them for seed. In fact only about one-fourth of the total acreage in the country is harvested for seed. Therefore much more seed that is bought will be used to produce hay and soil improvement than for growing seed. Farms that do not produce their own seed furnish a market for the surplus grown on other farms.

The marketing of the crop can be greatly improved. Sometimes, for instance, there appears to be a shortage of cowpea seed in a given locality when the deficiency is really due to a faulty distribution of supplies. This bulletin points out some of the methods by which growers who harvest cowpeas can prepare them for market in the best way and sell them so as to get the best net returns. This would mean that the farmers who have to buy cowpea seed would be adequately supplied with seed that has been carefully handled.

THE COMMERCIAL SUPPLY

It is estimated that normally 4,500,000 to 6,500,000 bushels of cowpeas are needed yearly for seed. The quantity is increasing as the acreage increases for hay and soil improvement (table 1). About half is produced on the individual farms where it is used. The other half must be obtained either from dealers or direct for other growers.

TABLE 1.—*Acreage and seed requirements for cowpeas, average 1924–28, annual 1929–37*

Year	Acreage for—				Seed re- quire- ments ¹	Produc- tion pre- vious year	Surplus
	Seed	Hay	Other	Total			
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 bushels	1,000 bushels	1,000 bushels
1924–28 average.....	661	1,158	620	2,439	2,997	—	—
1929.....	541	938	320	1,799	2,157	4,124	1,967
1930.....	645	1,080	320	2,045	2,422	3,639	1,217
1931.....	1,085	1,577	424	3,086	3,544	4,040	496
1932.....	1,128	2,503	668	4,299	5,320	7,921	2,601
1933.....	1,027	2,016	535	3,578	4,340	7,235	2,895
1934.....	1,060	2,381	517	3,958	4,877	6,790	1,913
1935.....	1,033	1,985	472	3,490	4,202	6,147	1,945
1936.....	1,279	1,970	1,747	4,996	6,215	6,971	756
1937.....	1,387	2,237	1,761	5,385	6,690	7,720	1,030

¹ Seed requirements computed as follows: $\frac{1}{2}$ bushel per acre for seed purposes and $1\frac{1}{2}$ bushels per acre for hay and for other purposes.

The commercial supply—that is, the quantity of seed that must be obtained from commercial sources—ranges from 2,500,000 to more than 3,000,000 bushels. This supply represents the production of over 200,000 farms, for most farms raise only small quantities. Table 2 shows the average production per farm by States a few years ago. This means that there should be a systematic assembling of surpluses from individual farms, careful preparation of the supplies for market, and storage until the seasonal demand comes. Then the stocks should be distributed to areas and farms where the seed supplies are needed.

TABLE 2.—*Number of farms growing cowpeas and quantity of cowpeas harvested, 1934 ¹*

State	Farms growing cowpeas for—		Quantity of cowpeas harvested	
	All pur- poses	Seed	Total	Per farm
	Number	Number	Bushels	Bushels
Alabama.....	98,985	72,043	879,466	12.2
Arkansas.....	91,222	42,163	411,222	9.8
Florida.....	8,983	4,538	153,128	33.7
Georgia.....	74,710	46,926	696,009	14.8
Illinois.....	29,015	10,239	451,239	44.1
Indiana.....	6,578	2,071	108,877	52.6
Kentucky.....	18,459	3,013	65,636	21.8
Louisiana.....	44,176	24,992	247,992	9.9
Mississippi.....	96,773	66,887	682,055	10.2
Missouri.....	23,133	2,744	56,176	20.5
North Carolina.....	76,029	29,450	322,725	11.0
Oklahoma.....	16,142	7,733	107,609	13.9
South Carolina.....	98,642	68,779	1,023,762	14.9
Tennessee.....	52,612	19,100	166,762	8.7
Texas.....	68,672	45,953	617,364	13.4
Virginia.....	27,362	7,752	107,790	13.9
Total or average.....	831,493	454,383	6,097,648	13.4

¹ Census of Agriculture, 1934.

SURPLUS-PRODUCING STATES

Most of the commercial supply of cowpea seed is produced in Alabama, Georgia, South Carolina, Mississippi, and Texas. Fairly

large quantities, but not always enough to meet local requirements, are grown in North Carolina, Louisiana, Oklahoma, Arkansas, Illinois, and Tennessee. The relative importance of the producing States, including those that are estimated to have produced a surplus in 1937, is shown in table 3.

TABLE 3.—*Acreage and seed requirements for cowpeas by States, 1937*

State	Acreage for—				Seed requirements ¹	Production previous year	Surplus or deficit
	Seed	Hay	Other	Total			
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 bushels	1,000 bushels	1,000 bushels
Indiana.....	6	20	3	29	37	48	11
Illinois.....	54	104	7	165	193	266	73
Missouri.....	14	45	10	69	89	18	-71
Virginia.....	11	84	17	112	157	90	-67
North Carolina.....	66	220	72	358	471	385	-86
South Carolina.....	227	505	109	841	1,035	1,374	339
Georgia.....	169	255	243	667	832	1,110	278
Florida.....	9	10	16	35	43	68	25
Kentucky.....	8	47	23	78	109	51	-58
Tennessee.....	35	175	39	249	339	166	-173
Alabama.....	252	131	122	505	506	1,241	735
Mississippi.....	151	180	142	473	559	836	277
Arkansas.....	115	230	229	574	746	582	-164
Louisiana.....	58	58	117	233	281	301	10
Oklahoma.....	31	44	71	146	188	40	-148
Texas.....	178	108	539	825	1,059	1,122	63
Other States.....	3	21	2	26	36	22	-14
United States.....	1,387	2,237	1,761	5,385	6,690	7,720	1,030

¹ Seed requirements computed as follows: $\frac{1}{2}$ bushel per acre for seed purposes, $1\frac{1}{2}$ bushels per acre for hay and for other purposes.

Production varies in any locality from year to year. The yield of cowpeas is affected by the weather and in some instances the quantity harvested may be affected by the labor supply and the necessity for using the available labor to handle the main cash crops. The price that prevails for cowpea seed also may influence the quantity harvested for this purpose. Therefore, a large acreage or a heavy potential production of cowpeas does not necessarily mean that a correspondingly large supply will be available for seed.

VARIETIES USED

Leading commercial varieties of cowpeas are Whippoorwill or "Whips," Clay, Brabham, Iron, New Era, and "mixed." Surplus quantities of some of these varieties are produced in more or less restricted localities. To learn what percentage of the total quantity of cowpeas shipped from the surplus-producing localities in each State is represented normally by each variety, an extensive inquiry was made among shippers in 1919 and again in 1934.

There was no outstanding general shift in the distribution by varieties during this 15-year period. The Whippoorwill variety continues to lead in importance from the standpoint of the commercial supply. It is followed closely by the commercial group designated "mixed."

Within some States, however, a noticeable shift occurred. For example, in Georgia the Whippoorwill variety constituted 24 percent of the cowpeas shipped during 1919, whereas by 1934 it had dropped

to 16 percent. A similar change in the use of this variety occurred in North Carolina. In 1934, 13 percent of the cowpeas shipped in Alabama were of the Brabham variety, whereas in 1919 it was not commercially important in that State. On the other hand, the Brabham variety was reported to be less important in relation to total shipments in Georgia in 1934 than in 1919. Similar comparisons may be made with other varieties in other States (table 4).

TABLE 4.—Percentage shipments of cowpeas, by varieties and States, 1934 and 1919

State	Year	Black-eye and White	Whip-poor-will	New era	Brabham	Iron	Clay	Mixed	Other varieties
		Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Alabama	1934	4	40	8	13	(1)	16	15	4
	1919	10	38	4	(1)	(1)	18	28	2
Arkansas	1934	8	83	1			2	3	3
	1919	1	94				1	3	1
Georgia	1934	1	16	3	16	10	16	33	5
	1919	3	24	(1)	23	16	10	22	2
Illinois	1934		30	15				50	5
	1919		50	27				22	1
Mississippi	1934	1	34	3		(1)	25	7	30
	1919	2	48	3			24	23	
Missouri	1934	1	40	20	1		10	27	1
	1919	1	38	45			1	15	
North Carolina	1934	7	10	5	2	2	24	30	20
	1919	11	25	2	1	1	14	44	4
South Carolina	1934	1	13	2	5	10	14	48	7
	1919	4	20	1	2	2	20	47	4
Tennessee	1934	1	68	4	(1)		6	3	18
	1919	5	58	4			14	18	1
Virginia	1934	11	20	3	5		5	30	26
	1919	15	25	3			6	35	16
Average	1934	2.6	31.6	5.1	6.1	3.7	14.1	26.7	10.1
	1919	5.5	33.9	3.7	5.0	3.6	15.0	30.5	2.8

¹ Less than 1 percent.

INCREASING THE VALUE BY FARM PREPARATION

The loss to farmers through the improper handling and preparation of cowpeas is difficult to estimate. But wide difference between the average price received by growers and that paid by farmers who bought the seed indicates somewhat the possibilities of getting a higher farm price. This margin between the buying and the selling prices represents, in the main, services performed, many of which can be performed more economically by the growers on the farm.

Any effort on the part of growers to improve the quality of their cowpeas increases the price they will probably bring. In preparing cowpeas for market it is well for the grower to keep in mind the quality of seed he would like to get if he were to buy cowpeas for planting and then try to bring his product up to this high standard. A high-quality product usually commands a good price. Cowpeas are no exception to this general rule.

HARVESTING AND THRESHING ¹

Cowpeas may be harvested for seed with a mower or a self-rake reaper. The regular grain thresher can be adjusted for threshing cowpeas. But specially designed machines are available which can also be used for threshing other seed and grain crops.

¹ More complete information relative to methods of harvesting and threshing cowpeas will be found in Farmers' Bulletin No. 1153, entitled "Cowpeas: Utilization."

The combine harvester-thresher which is coming into more general use for harvesting grain, seed, and other crops may also be adapted for harvesting cowpeas under favorable conditions.

For hulling cowpeas that have been picked by hand a small pea huller, which may be bought at a relatively low price, does much more effective work than is done by flailing. It is operated by hand or by power. A uniform speed of both the cylinder and fan shaft is desirable; this can be maintained more satisfactorily when power is used.

The pods should be thoroughly dry before they are hulled. Best results are obtained when hulling is done on a clear day following 3 or more days of fair weather, because the hulls are likely to absorb moisture during cloudy and rainy weather, even though they may be stored in a dry place. Cowpeas that are hulled on such a machine are put through screen and air-blast separations which remove most of the hulls, chaff, dirt, and broken and very light weight seeds. Types of hullers of this kind are illustrated in figure 3.

RECLEANING

In some cases the quality of cowpeas may be improved by recleaning after they are threshed or hulled. If a small huller (fig. 1) is being used, the cowpeas may be run through it a second time to remove more of the foreign material and small broken seeds. But when the huller is used for this purpose the cowpeas must not come in contact with the cylinder.

To show more clearly what can be accomplished by recleaning cowpeas, tests were made in 1922, in 1932, and again in 1937. Representative samples, collected from various producing sections, were analyzed to find the percentage of split and broken peas, damaged peas, and foreign material they contained. The results are given in table 5 and are illustrated in figures 2 and 3. The total defects found in the samples ranged from 1 percent to more than 18 percent. The value of each lot for seed purposes may be said to be lowered to the extent of the presence of this worthless material. In some cases the loss comes almost wholly from broken seeds (fig. 2, A). The cowpeas from which this sample was taken were threshed or hulled by machinery. The large percentage of broken seeds shows that the machine was carelessly operated. By operating the thresher or huller at the proper speed and, if necessary, by making simple adjustments as recommended by the manufacturer, this loss can be prevented.

The foreign material in the sample shown in figure 3, A, is composed principally of hulls and chaff. This lot was flailed out by hand and was not cleaned as thoroughly as it could have been, even with hand work. Nine pounds of such foreign material was present in each 100 pounds; if clean cowpeas were selling at \$2 per bushel, this lot was worth only \$1.82 per bushel. The reduced value is reflected in the price received by the grower, and the maximum price may reasonably be expected only when the stocks for sale have been recleaned properly. Some of the samples contained only 1 percent of total defects. All hulls and chaff were cleaned out, and only a small quantity of broken seeds was present, as illustrated in figure 3, B. Any one or all of the samples examined could have been cleaned on the farm as thoroughly as this one and the price to the grower increased accordingly.

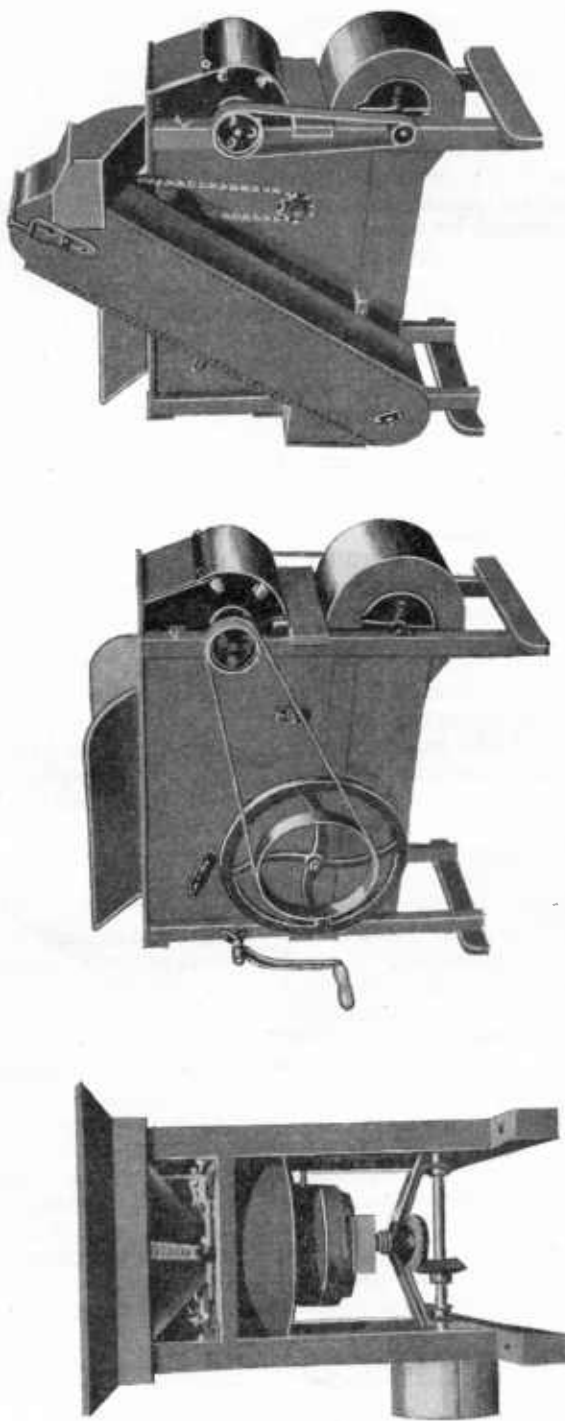


FIGURE 1.—Types of machines used in hulling cowpeas.

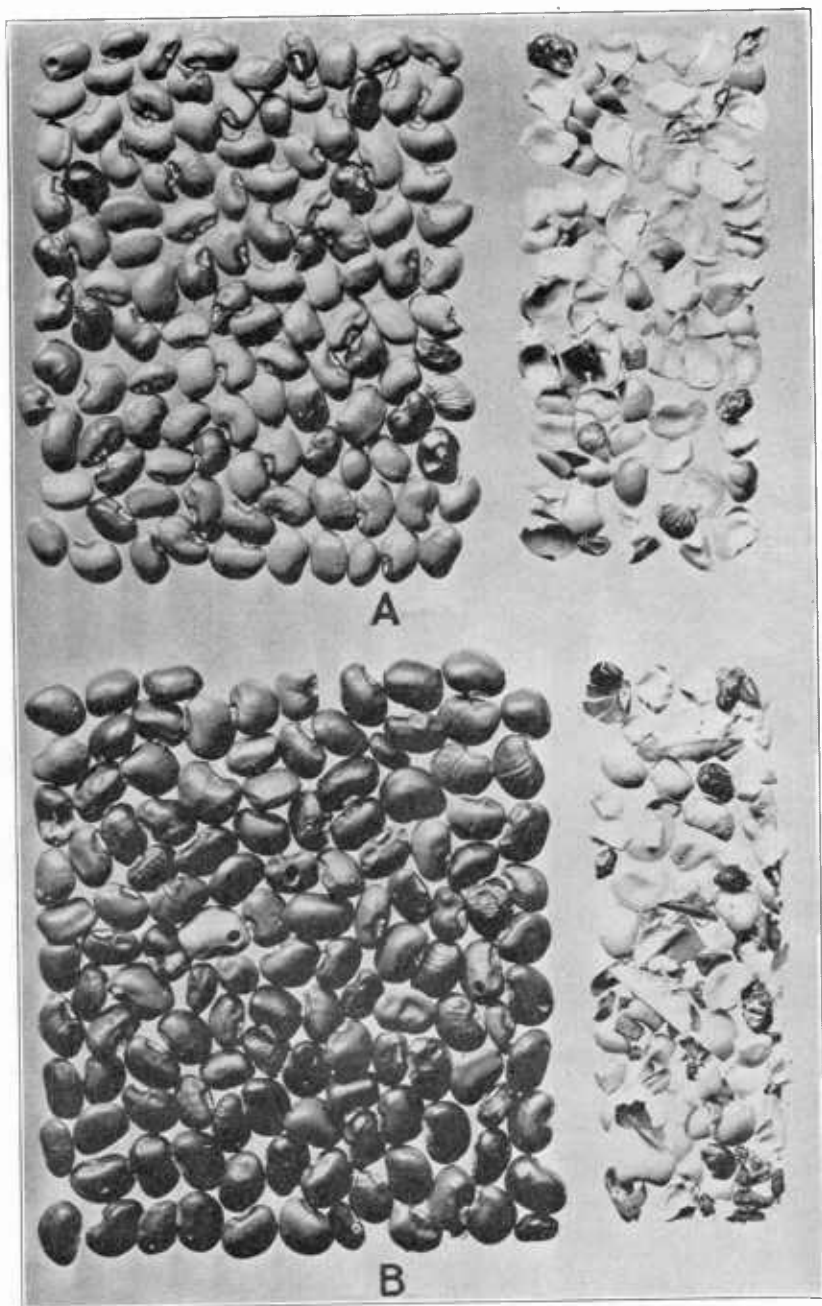


FIGURE 2.—Cowpeas: *A*, Machine-threshed, containing 18.5 percent of defects, mostly splits and broken seeds; *B*, containing 12.5 percent of splits, broken and damaged seeds, and chaff.

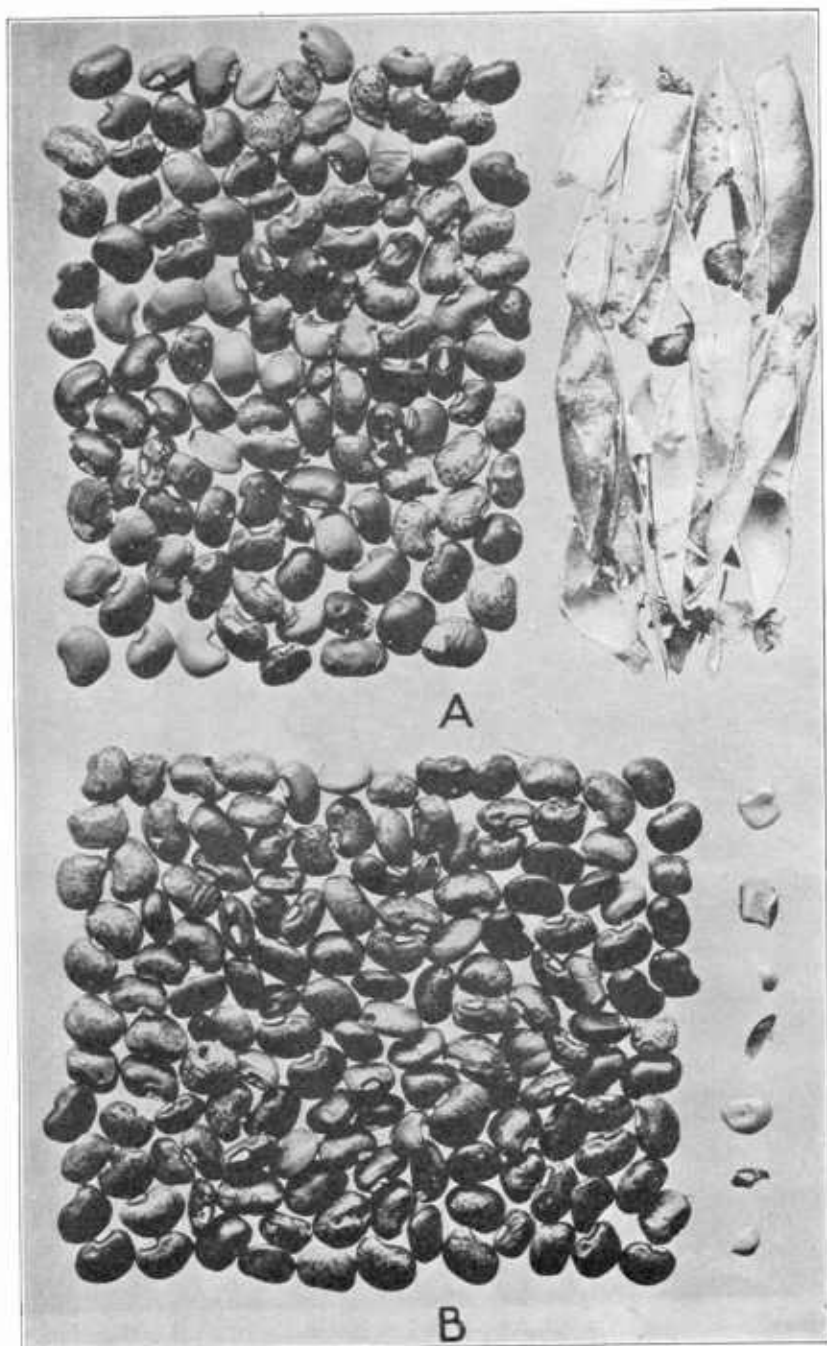


FIGURE 3.—Cowpeas: *A*, Flailed out by hand, containing 9 percent of foreign material, mostly hulls; *B*, machine-threshed or machine-hulled, free of chaff and dirt, and containing only 1 percent of broken seeds.

TABLE 5.—*Analysis of representative samples of commercial cowpeas*

Laboratory No.	Splits	Damage	Foreign material	Total defects	Sound whole	Laboratory No.	Splits	Damage	Foreign material	Total defects	Sound whole
	Percent	Percent	Percent	Percent	Percent		Percent	Percent	Percent	Percent	Percent
1.....	0.8	1.0	0.7	2.5	97.5	19.....	1.8	3.4	1.2	6.4	93.6
2.....	1.5	1.3	1.3	4.1	95.9	20.....	6.5	2.3	.9	9.7	90.3
3.....	1.5	1.5	.7	3.7	96.3	21.....	2.3	1.2	.9	4.4	95.6
4.....	3.6	1.4	1.3	6.3	93.7	22.....	1.9	6.6	2.5	11.0	89.0
5.....	3.7	6.8	.5	11.0	89.0	23.....	.3	4.2	.6	5.1	94.9
6.....	2.6	2.6	.2	5.4	94.6	24.....		2.8	(1)	2.8	97.2
7.....	1.4	4.5	.6	6.5	93.5	25.....	3.5	5.1	.6	9.2	90.8
8.....	1.3	3.6	2.1	7.0	93.0	26.....	3.2	5.2	3.2	11.6	88.4
9.....	1.2	2.5	.6	4.3	95.7	27.....	1.5	1.2	.8	3.5	96.5
10.....	.6	.3	.1	1.0	99.0	28.....	5.6	2.4	4.5	12.5	87.5
11.....	.8	1.6	.6	3.0	97.0	29.....	.5	6.8	1.7	9.0	91.0
12.....	1.8	1.8	.3	3.9	96.1	30.....	14.6	1.3	2.6	18.5	81.5
13.....	1.1	1.0	.1	2.2	97.8	31.....	.5	.8	.2	1.5	98.5
14.....	2.4	2.2	.3	4.9	95.1	32.....	1.4	.3	1.1	2.8	97.2
15.....		2.0	.9	2.9	97.1	33.....	.3	.5	.2	1.0	99.0
16.....	.7	2.1		2.8	97.2	34.....	.8	.8	.4	2.0	98.0
17.....	1.1	2.3	.4	3.8	96.2	35.....	2.4	1.3	1.3	5.0	95.0
18.....	3.2	2.4	.2	5.8	94.2						

¹ Trace.

SACKING

Cowpeas should be sacked in new even-weight bags, preferably with a capacity of 120 pounds, or 2 bushels. Second-hand bags may serve the purpose if they are strong and in good condition. The bags should be of 10-ounce burlap, or heavier. A more expensive seamless cotton bag may be used if desired. The bags should be sewed or tied securely with strong twine.

It is not uncommon for growers to market cowpeas locally in all sorts of containers—sacks, barrels, boxes, or any receptacle that will carry the cowpeas to the shipper's warehouse. The cowpeas are then poured into bins, and sometimes the containers are returned to their owners. Before the shipper makes a shipment it is necessary for him to reclean, if this has not been done by the grower, and resack the entire lot. The service of recleaning and sacking necessarily carries a cost with it. By doing this work on the farm, growers receive an increased price. The cowpeas will be more attractive in appearance and will be in a readily salable condition.

STORAGE

Cowpeas should be stored in a dry place and protected from weevils and rodents. It is a practice on many farms to pick the pods by hand and store them until the winter, postponing the hulling until after the rush work of harvesting other crops. But there are many more advantages in hulling cowpeas as soon as they are thoroughly dry, recleaning them, and storing them in sacks. Less storage space is required; the straw, hulls, and screenings are available for feeding to livestock; the bags are easily transferred from place to place; sales may be made at an opportune time with the least possible delay; and the cowpeas can be treated promptly and effectively with disinfectant to destroy any weevils or other insect pests present, preventing possible serious loss. The treatment with a disinfectant is important because cowpeas are very susceptible to weevil damage.

From 6 to 10 months elapse between the time cowpeas are harvested and the time they are needed for planting the following season. Most of the cowpeas are harvested during August, September, and October as shown in table 6.

TABLE 6.—*Percentage of cowpeas harvested by months*

State	June	July	August	September	October	November
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
North Carolina.....		3	10	39	30	18
South Carolina.....		4	15	36	35	10
Georgia.....	2	7	23	42	22	4
Alabama.....		10	26	43	20	1
Mississippi.....	1	6	21	36	28	8
Louisiana.....	1	7	20	45	27	
United States.....	.9	7.6	21.8	41.1	23.8	4.8

The movement from growers' hands begins about November 1 and increases through December, January, and sometimes February. On an average, about 40 percent of a given year's crop of cowpeas has been sold by the growers by December 31. This varies widely from year to year and by States and districts (table 7).

TABLE 7.—*Percentage of cowpea seed crop sold by growers up to December 31, average 1928-32, annual 1934-37*

State or district	Average, 1928-32	1934	1935	1936	1937
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Delaware.....	40	39	42	25	35
Virginia.....	40	53	53	29	49
North Carolina.....	33	22	38	28	18
South Carolina.....	50	51	44	44	43
Tennessee.....	53	43	50	49	39
Mississippi.....	37	35	31	45	36
Northern Alabama.....	30	26	15	43	9
Southern Alabama.....	46	35	45	45	30
Northern Georgia.....	43	27	44	43	23
Southwestern Georgia.....	42	25	46	28	26
Southeastern Georgia.....	60	64	57	46	50
Illinois.....	38	38	26	15	18
Indiana.....	45	50	45	76	40
Missouri.....	43	20	20	20	25
Average.....	45	41	37	40	35

As the heaviest demand from farmers comes during the late spring and early summer, much of the crop must be carried for a long period. This gives plenty of time for recleaning and transporting the cowpeas from producing to consuming sections. They must be stored during much of this period, however, and this fact, together with the warm weather prevailing in the more important producing sections, increases the chances of weevil infestation. Some effective way of reducing such injury is essential if the cowpeas are to be of high quality for seed.²

GERMINATION OF SEED

The value of cowpeas for seed is directly affected by the percentage that will grow. Germination is as important in cowpeas, from the standpoint of the farmer who buys them for seed, as in other field-crop seeds. The farmer who grows them needs to remember this. Practically all of the cowpeas entering commercial channels are sold and used for seed. Cowpeas that are unfit for seed are sold for feed at a very low price, while cowpeas that are pure as to variety, recleaned,

² Farmers' Bulletin 1275, Weevils in Beans and Peas.

and of high germination are the most valuable for seed and sell at the highest price.

When harvest is delayed because of continued rains, cowpeas almost invariably are of low germination. The damage is clearly visible and may be so great as to make the cowpeas not worth harvesting. Cowpeas that are harvested promptly at maturity, threshed when properly cured, stored in a dry place, and protected from weevil or other insect injury are usually of high viability. But high percentage of germination should not be assumed. A test is always advisable before the cowpeas are offered for sale. Most States have seed laws (p. 14) requiring that when cowpeas are advertised for sale or delivered by a common carrier, for seed, the percentage of germination, together with other information, shall be shown on the tag or label attached to each bag or other container.

MARKETING COWPEAS

The cowpea market is uncertain. This is chiefly because of the variation in demand. The demand is limited and is affected by the buying power of farmers, the quality of the crop for planting purposes, and the comparative price and supply of seed of other crops that compete in the crop rotation.

As already emphasized, production per farm is small, and it is difficult to determine the supply to be marketed. The United States Department of Agriculture issues timely reports each year which show the comparative acreage, yield, and price of the new crop.

The producing States of Mississippi, Alabama, Arkansas, Georgia, South Carolina, North Carolina, and Texas are the heaviest users of cowpeas. There are a number of counties in these States which do not produce a surplus and ship in large quantities from other counties to use as seed. After the demand has been supplied within these States the net surplus is then sold in Louisiana, Oklahoma, Missouri, Tennessee, Illinois, Indiana, Ohio, Virginia, Maryland, Florida, and to a less extent in States farther north and east. There are a few counties or localities in these buying States in which a surplus is produced, but most of this is consumed in neighboring territory.

The geographical preference for varieties is an important factor in the commercial distribution of cowpeas. The late-maturing, vine-producing varieties, such as Clay, Iron, and Red Ripper, are preferred in the Mississippi Delta and the Sugar Belt of Louisiana. In the North Central and Eastern States the Whippoorwill, New Era, and other early maturing varieties are more in demand. The Brabham, Iron, and Victor are more desirable in the wilt-infected areas of the South because of their resistance to wilt and root-knot, and to a great extent have replaced other standard varieties on farms where these diseases prevail.

When a grower has a product that has been prepared properly for the market and knows the consuming areas and the varieties desired, he is anxious to find out how he can sell his product to the best advantage. There are four principal outlets for cowpeas: (1) Neighboring farmers, (2) local shippers, (3) distant seedsmen, and (4) distant farmers, contacted through farm-paper advertising. The best method of selling for a grower to use will depend largely upon his location and the quantity of cowpeas he has for sale.

SELLING TO NEIGHBORING FARMERS

In marketing cowpeas, growers should consider first the possible demand from other farmers in their neighborhood. A grower may produce a surplus of cowpeas and sell them to a local shipper or ship them direct to a distant seedsman, when local farmers would have bought them and perhaps at higher prices. In such cases, cowpeas have to be shipped back into the locality and almost always at increased prices. Few localities where this crop is grown use as many cowpeas as might be used economically, and, in most instances, there is no one who can afford to pay more for cowpeas, if he needs them, than a farmer in the immediate neighborhood of the producer. This is true especially in States or sections where only a relatively small number of the farmers produce a surplus and many more farmers have to buy their seed supply.

SELLING TO LOCAL SHIPPERS

After supplying the local farm market, growers should consider the possibility of selling their cowpeas to local shippers. Usually such shippers are located in every town in sections where surplus cowpeas are produced. The local shipper renders a service by assembling several small lots of cowpeas bought from as many growers, recleaning and resacking them if necessary, and shipping them to wholesale distributing markets. He provides a ready market where growers may sell their product at any time and receive a prompt cash settlement. He assumes the risk of loss in storage and of finding a satisfactory market. Only a little of the grower's time is involved, and he has no further risk.

If growers cooperate with shippers by preparing their cowpeas properly for market, as already outlined, and do not rush them to market too early in the season or at a time when the demand is poor, shippers can operate on a much lower margin with safety and pay a correspondingly higher price to growers. Delivery to local shippers should be made in as large lots as possible. The surplus cowpeas of the average farm can be delivered in a single trip to the shipper's warehouse. One trip and one transaction should complete the job if practicable, for it costs shippers practically as much to receive, weigh, pay for, and record a 1-bag lot as a 10-bag or larger lot, not to mention the farmer's time.

Usually there is keen competition between local shippers at the shipping points, which helps to give growers a reasonable price for cowpeas. But frequently shippers are not thoroughly familiar with the principal producing and consuming areas, wholesale distributing points, varietal preferences, and other price-affecting factors. Shippers, as well as growers, may inform themselves through reports issued by the United States Department of Agriculture regarding these fundamentals and regarding prospective production, prices, and movement of the new crop. They will then know whether local prices are in line with those prevailing in other sections.

SELLING TO DISTANT SEEDSMEN

If there is no local demand, either from farmers or local shippers, or if the local market is unsatisfactory for any reason, growers should try to find a market elsewhere. The first outlet to be considered is seedsmen and the dealers in large distributing centers.

If a grower thinks of selling to such seedsmen and dealers he should first take inventory of his stocks of cowpeas by varieties. He should then draw small representative samples of each variety, submit them to several seedsmen who he thinks are in the market, stating the quantity of each variety offered, and ask for quotations f. o. b. grower's shipping point. Each sample should contain at least 4 ounces and be numbered or marked to identify it with the lot from which it was drawn. It should be divided and half of it should be retained by the grower for use in case any question arises as to the quality of the cowpeas shipped.

If one of the offers received is accepted by the grower he should telegraph acceptance immediately, confirming it by letter. Shipment should be made promptly or at any time specified in the terms of sale. The quality of stocks shipped should compare favorably with that of the samples submitted, and the shipment should be made up of varieties and quantities as sold. It is necessary that a careful check be made of the weights by varieties, so it is desirable that the bags have a net capacity of 120 pounds or 2 bushels and that they should be tagged or stenciled with the variety of cowpeas contained. Shipments of cowpeas usually are made on terms of the bill of lading attached to sight draft for 60 to 80 percent of the amount of the invoice, the balance to be paid upon arrival and acceptance of the goods, or on terms of arrival draft for the full amount.

SELLING THROUGH FARM-PAPER ADVERTISING

Through farm-paper advertising growers are likely to receive, on an average, the largest gross return for cowpeas. But on the other hand the net returns may be less than might be received through any of the other agencies already mentioned. But sometimes this method seems to be most effective. If there is no local farm demand, if there is no local shipper, and if satisfactory contact cannot be established with a distant seedsman, then the most practical outlet remaining is through advertising in a farm paper, or possibly a weekly or a daily newspaper.

As an advertisement aims to bring the seller into contact with prospective buyers, it should be so worded as to describe briefly and yet clearly the product for sale. It should contain all the information that a buyer should have, including the selling price, so he can place an order without making further inquiry. Suggested forms of advertisements are shown below:

Cowpeas.—Will sell 100 bushels sound, recleaned, Brabham cowpeas containing 5 percent mixture Whips at \$2.40 per bushel for entire lot, f. o. b., packed in new 2-bushel burlap bags.

INGLESIDE FARM, Jonesville, Ala.

Cowpeas for sale.—25 bushels Whips, \$2.15 per bushel; 15 bushels New Era, \$2.25 per bushel; 40 bushels Brabhams, \$2.60 per bushel; sacked in new even-weight 2½-bushel burlap bags.

A. GROWER, Anytown, U. S.

Cowpeas.—150 bushels Iron cowpeas, recleaned, in 2½-bushel burlap bags, \$2 per bushel f. o. b. Sample on request.

Name

Post office

State

The cost of running an advertisement in the classified columns of most farm papers ranges from 5 cents to 15 cents a word for each issue, varying chiefly with the circulation of the various papers. At the low rate, a 30-word advertisement may be run three consecutive issues at a total cost of \$4.50. Sales of only 30 bushels from such an advertisement would distribute the advertising cost of 15 cents per bushel. A single insertion of an advertisement does not always bring the desired results, and it may be necessary to repeat it several times, thus increasing the cost per unit of quantity sold.

It seems advisable that growers having only a few bushels of cowpeas to sell, postpone advertising until the early spring. Farmers are more interested in offers that are placed before them near the planting season.

Orders for cowpeas usually are accompanied by cash, and shipment should be made promptly. All inquiries received should have prompt attention whether an order comes with them or not. Any orders received after the supply is sold out should be acknowledged, and if money is enclosed it should be returned at once. Reputation for promptness in handling all the details connected with selling by mail order is a valuable asset. Care should be taken to fill all orders with the specified variety and quantity. The cowpeas shipped should be of high quality or just as represented in advertisements and letters or by samples.

In selling cowpeas direct to the other farmers through farm-paper advertising, or through any other medium when delivery is made by a common carrier, growers come in contact with the requirements of the State seed laws. Most States have laws which require that seeds, including cowpeas, when sold within the State, must bear a label or tag showing all or a part of the following information: Pure seed, percentage; inert matter, percentage; foreign seed, percentage; noxious weed seed, names and number or percentage; germination, percentage. The date of the test; locality where grown; and the year grown must also be given, as well as the kind of seed and the name and address of seller. Information regarding the provisions of any of the State seed laws as affecting cowpeas may be obtained from the State departments of agriculture or the State agricultural experiment stations.³

Selling cowpeas through farm-paper advertising entails much work, for which the average grower may not have time. To try to use this method before giving careful consideration to the advantages of local agencies and the disadvantages and expense of the mail-order method may prove a costly venture. On the other hand, a farm-paper advertisement may be the only means of reaching some farmer who wants to buy cowpeas for seed, but lives in a section where cowpeas are not generally grown and where no seed is available either from local growers or dealers.

MARKET PRICE OF COWPEAS

The market price of cowpeas varies with the commercial supply, the quality of the crop for seed, the variety, and the nearness to planting date. When the crop begins to move during November no one seems to know what price should be paid. Prices offered both by local shippers and by wholesale dealers at that time usually are lower than the price obtained for the bulk of the crop. To buy cowpeas early in the season and to store them, pending the opening of the spring de-

³ In May 1938 all the States except Florida and Georgia had seed laws.

mand, means risky speculation and fixed charges for storage and overhead expenses. The grower may well carry the cowpeas until a market is established. With the commercial supply being carried for 2 or 3 months by several thousand growers, the individual risk and cost is reduced to a minimum.

SEASONAL TREND OF PRICES

Prices paid to growers for cowpeas are almost invariably higher as the planting season approaches. This is because stocks are moving more freely from growers' hands through the various channels of distribution to farmers in consuming sections. When storing cowpeas on the farm temporarily until other farmers are ready to buy, growers may perform a service for which they will be well paid. This is shown clearly in table 8, which gives for a period of years the average prices paid to growers on the 15th of each month from the time the new crop begins to move from growers' hands in October until the movement is over in June of the following year. Although the price paid for any year's crop may not advance materially as the season progresses, the table shows that there is little if any decline. On the other hand, the price paid for the 1933 crop advanced 84 percent, or 73 cents per bushel, from November 15 to April 15; the 1935 crop advanced 73 percent, or 83 cents per bushel, from October 15 to June 15; and the 1937 crop advanced 40 percent from November 15 to May 15.

TABLE 8.—Average price per bushel paid to growers for cowpeas on the 15th of each month during the marketing seasons, 1930-37

Date	Marketing season							
	1930	1931	1932	1933	1934	1935	1936	1937
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
Oct. 15.....	2.20	0.98	0.70	0.94	1.26	1.13	1.37	1.18
Nov. 15.....	2.05	.93	.63	.87	1.25	1.15	1.33	1.13
Dec. 15.....	1.86	.93	.60	.92	1.30	1.15	1.38	1.18
Jan. 15.....	1.80	.92	.60	1.03	1.37	1.22	1.51	1.29
Feb. 15.....	1.75	.86	.60	1.25	1.47	1.29	1.69	1.34
Mar. 15.....	1.82	.88	.62	1.45	1.53	1.35	1.83	1.43
Apr. 15.....	1.87	.82	.69	1.60	1.54	1.54	1.96	1.51
May 15.....	1.93	.76	.89	1.63	1.57	1.80	1.98	1.59
June 15.....	1.96	.72	1.02	1.60	1.63	1.96	1.97	1.69

PRICE VARIATIONS IN DIFFERENT SECTIONS

Considerable variation is found between the average prices received by growers in different producing sections. Table 9 shows the average price received by growers for the crops of 1930 to 1937, inclusive, by States or districts.

TABLE 9.—Average price per bushel paid to growers for cowpeas, important producing districts, crops of 1930-37

District	Crop of—							
	1930	1931	1932	1933	1934	1935	1936	1937
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
North Carolina.....	2.15	0.75	0.65	1.45	1.40	1.30	1.55	1.40
Eastern South Carolina.....	1.40	.55	.45	1.00	1.25	1.05	1.45	1.20
Western South Carolina.....	1.45	.70	.45	.90	1.25	1.10	1.45	1.10
Northern Alabama.....	1.45	.60	.55	1.00	1.45	1.20	1.50	1.25
Southern Alabama.....	1.30	.70	.40	.95	1.15	1.10	1.40	1.25
Northern Georgia.....	1.40	.75	.45	1.15	1.40	1.10	1.45	1.20
Southwestern Georgia.....	1.40	.75	.50	1.15	1.35	1.05	1.55	1.15
Southeastern Georgia.....	1.50	.65	.40	1.00	1.40	1.05	1.50	1.25
Southern Illinois.....	1.70	.55	.35	.95	1.10	1.05	1.85	1.20
Southern Missouri.....	1.65	.75	.45	1.00	1.55	1.10	2.10	1.30

This variation in price is largely the result of the speculative nature of all offers for the crop, especially that part which growers try to market early in the season. The tendency is for the price in various sections to become more nearly uniform as the selling season progresses.

RELATION OF VARIETY TO PRICE

There is a variation in the price of cowpeas by variety. Some varieties sell at a premium of 25 to 50 cents per bushel over the lowest-priced variety. This is an additional reason why growers should preserve the identity of their cowpeas and market them by variety name. Variation in the selling prices of the different varieties is illustrated by quotations compiled from price lists of five representative seedsmen and shown in table 10.

TABLE 10.—*Wholesale prices per bushel of specified varieties of re-cleaned cowpeas quoted by representative seedsmen, March 1938*

Variety	Prices quoted by seedsmen—				
	A	B	C	D	E
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
Whippoorwill.....	2.15	2.55	2.60	2.05	2.15
New Era.....	2.25		2.30	2.10	2.10
Brabham.....		2.80	2.75		
Iron.....		2.55			
Clay.....		2.15	2.30		
"Whip" mixed.....	2.00			1.90	
Mixed.....	1.90	2.10	2.10	1.85	2.00

The Whippoorwill is the basis for variety values. In general, the Brabham seems to command the highest price, while mixed varieties invariably are sold at the heaviest discount. The price of the New Era does not vary greatly from the basic price, sometimes being slightly higher and sometimes slightly lower.

It should not be concluded that because a variety is higher in price it is necessarily more expensive for planting purposes. The New Era, Brabham, and Iron varieties, for example, are smaller than the Whippoorwill and Clay and have a proportionately greater planting capacity per unit of weight. For this reason, other factors being equal, the varieties with the smaller seeds, even at a higher price, may be more economical for the farmer to buy for planting. The estimated number of cowpeas per pound by varieties and the relative planting capacity of each variety are given in table 11.

TABLE 11.—*Average number of cowpeas per pound and planting capacity of specified varieties as compared with Whippoorwill*

Variety	Cowpeas per pound	Planting capacity as a percentage of Whippoorwill	Variety	Cowpeas per pound	Planting capacity as a percentage of Whippoorwill
	<i>Number</i>	<i>Percent</i>		<i>Number</i>	<i>Percent</i>
Brabham.....	5,200	173	Unknown.....	2,800	93
New Era.....	4,500	150	Red Ripper.....	2,400	80
Iron.....	3,800	127	Black.....	2,400	80
Groit.....	3,200	107	Blackeye (Large).....	2,200	73
Whippoorwill.....	3,000	100	Taylor.....	1,800	60
Clay.....	2,900	97			

DISCOUNT FOR MIXED VARIETIES

It was shown in table 4 that from 15 to 50 percent of the cowpeas shipped in leading producing States is "mixed." The average price received by growers for mixed varieties is 10 to 25 percent less than that received for straight varieties. On the basis of a market value of \$2 a bushel for straight varieties, the direct loss to growers on this part of their crop is 20 cents to 50 cents a bushel.

This unfavorable condition is easy to correct. Indifference to the varietal purity of seed stocks causes most of the mixed cowpeas found on the markets. Only pure seed of known varieties should be planted if it is intended to sell the seed crop. The varieties of cowpeas are described in detail in a bulletin ⁴ issued by the United States Department of Agriculture.

Cowpeas also become mixed during harvesting and threshing. This can be prevented by using ordinary care in keeping each variety separate during the entire process of harvesting and threshing, whether by hand or by machinery.

The exact meaning of the term "mixed" as applied to cowpeas is sometimes misunderstood by growers. Sometimes growers have sold to local shippers a lot of cowpeas as mixed when really it consisted of one or more bags each of several varieties. For example, the lot may consist of 30 bushels total, made up of 5 bushels of Whippoorwill, 10 bushels of Brabham, 8 of Clay, and 7 of Iron, each variety in separate bags. Only when two or more varieties of cowpeas are contained in the same bag and their identity is lost should they be classed as "mixed" and sold at the prevailing discount.

Just what percentage of other varieties should be permitted in a given variety before it is classed as mixed is not certain. This is a question of standards and grades. But the discount in price usually is not graduated according to the percentage of other varieties present. For example, the presence of 10 percent of other varieties may force cowpeas into the mixed class and reduce the price to the same low level as a 50-50 mixture.

This is not as it should be, for a bushel of Whippoorwill that contains only 10 percent of other varieties, for example, is of greater value, on the basis of the present relation of varieties, than a bushel of Whippoorwill containing a larger percentage of other varieties and is of less value than a bushel of Brabham that contains only 10 percent of other varieties.

Although cowpeas are sold on the basis of sample and description and not by grade, it should not be difficult to arrive at a fair price for mixtures. Growers who offer cowpeas for sale should be accurate and brief in their descriptions. A study of a few samples should assist growers in this matter. By taking a sample containing 100 cowpeas and counting the number of each variety present the grower will get a result that indicates automatically the percentage of each variety. If, for example, a 100-seed sample is composed of 75 Whippoorwill, 10 Clay, 8 Red Ripper, and 7 Black the description to use is "Whippoorwills containing 25 percent of other varieties."

⁴ Farmers' Bulletin No. 1148, Cowpeas; Culture and Varieties.

COMPETITIVE CROPS

The acreage of summer legume and winter cover crops, particularly in the Cotton Belt, has increased greatly during recent years. Of these the cowpea has maintained its relative position because it succeeds under diverse conditions. With the greater use of soil-improving and forage-producing crops there naturally comes an increased demand for cowpea seed. If the supply is to keep pace with this increasing demand the seed crop must be conserved and prepared properly, and the surplus must be distributed evenly to farmers in consuming sections. This is the growers' opportunity. The profit received for this minor cash crop is usually in direct proportion to the quality of the cowpeas produced, the preparation given them for market, and the skillful selection of the time of marketing and the agency through which they are sold.

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